

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A plasma processing reactor comprising:

a chamber having a removable substrate support ~~which is not axially symmetric~~
asymmetric about a vertical axis of said chamber;

a RF power supply coupled to said chamber, said RF power supply adapted to supply RF power to ~~the interior of said chamber and thereby create~~ to generate a plasma therein; and

~~a coating of a film selectively applied prior to a processing to a portion of a surface of an inner sidewall of said chamber, said coating including an electrically resistive material~~ selectively disposed on at least one of the substrate support or a surface of said chamber, the electrically resistive material having an RF impedance substantially different from an underlying base material of said chamber.
2. (Currently Amended) The plasma processing reactor of claim 1, wherein said ~~film~~
~~is applied with~~ material includes varying composition ~~around said inner sidewall of said chamber so as~~ to vary the RF impedance azimuthally.
3. (Currently Amended) The plasma processing reactor of claim 1, wherein said ~~film~~
~~is applied with~~ material has a selectively varying thickness ~~around said inner sidewall of said chamber so as~~ to vary the RF impedance azimuthally.

4. (Currently Amended) The plasma processing reactor of claim 1, wherein said ~~film~~ material is disposed in various shapes ~~providing partial coverage around said inner sidewall of said chamber so as to vary the RF impedance azimuthally.~~
5. (Currently Amended) The plasma processing reactor of claim 1, wherein said ~~coating includes~~ material further comprises a plurality of film strips ~~which each having a variable thickness dimension. varies along said portion of said surface of said sidewall and along said substrate support.~~
6. (Currently Amended) The plasma processing reactor of claim 1, wherein said ~~coating~~ material further includes a plurality of film strips azimuthally positioned.
7. (Currently Amended) The plasma processing reactor of claim 1, ~~further comprising said coating of said film~~ wherein said material is selectively applied prior to [[said]] processing [[to]] a portion of a surface of said removable substrate support within said chamber.
8. (Currently Amended) The plasma processing reactor of claim 1, wherein said electrically resistive material includes Nickel.
9. (Currently Amended) The plasma processing reactor of claim 1, wherein said electrically resistive material includes Copper.

10. (Currently Amended) The plasma processing reactor of claim 1 wherein said coating material is plated to at least one of the substrate support or a surface of said chamber ~~said portion of said surface of said inner sidewall of said chamber.~~

11-20. (Cancelled)

21. (New) A plasma processing reactor comprising:

a chamber;

a RF power supply configured to supply RF power to the chamber to generate plasma therein;

a substrate support positioned within the chamber, the substrate support having a surface adapted to receive a wafer thereon, the substrate support configured to generate a first current return path and a second current return path to the RF power supply when energized, the first current return path being greater than the second current return path,

wherein the plasma processing reactor is configured to balance the first and second current return paths to achieve substantially uniform current density across the substrate support surface.

22. (New) The plasma processing reactor of claim 21, further comprising an electrically resistive material selectively disposed on at least one of a surface of the substrate support or a surface in the chamber to balance the first and second current return paths.

23. (New) The plasma processing reactor of claim 21, wherein the electrically resistive material is disposed as one or more strips on at least one of a surface of the substrate support or a surface in the chamber to balance the first and second current return paths.
24. (New) The plasma processing reactor of claim 21, wherein the electrically resistive material has a selectively varying thickness dimension.
25. (New) The plasma processing reactor of claim 21, wherein the electrically resistive material has a selectively varying composition characteristic.
26. (New) The plasma processing reactor of claim 21, wherein electrically resistive material has a selected impedance value to balance the first and second current return paths.
27. (New) A plasma processing reactor comprising:
- a chamber;
 - a substrate support positioned within the chamber, the substrate support having a surface adapted to receive a wafer thereon, the substrate support adapted to generate a first current return path and a second current return path to a RF power supply when energized, the first current return path being greater than the second current return path;
 - and

an electrically resistive material selectively applied to the plasma processing reactor, wherein the electrically resistive material is adapted to balance the first and second current paths to achieve substantially uniform processing of the wafer when the reactor is energized.

28. (New) The plasma processing reactor of claim 27, further comprising an electrically resistive material selectively disposed on at least one of a surface of the substrate support or a surface in the chamber to balance the first and second current return paths.

29. (New) The plasma processing reactor of claim 27, wherein the electrically resistive material is disposed as one or more strips on at least one of a surface of the substrate support or a surface in the chamber to balance the first and second current return paths.

30. (New) The plasma processing reactor of claim 27, wherein electrically resistive material has a selected impedance value to balance the first and second current return paths.